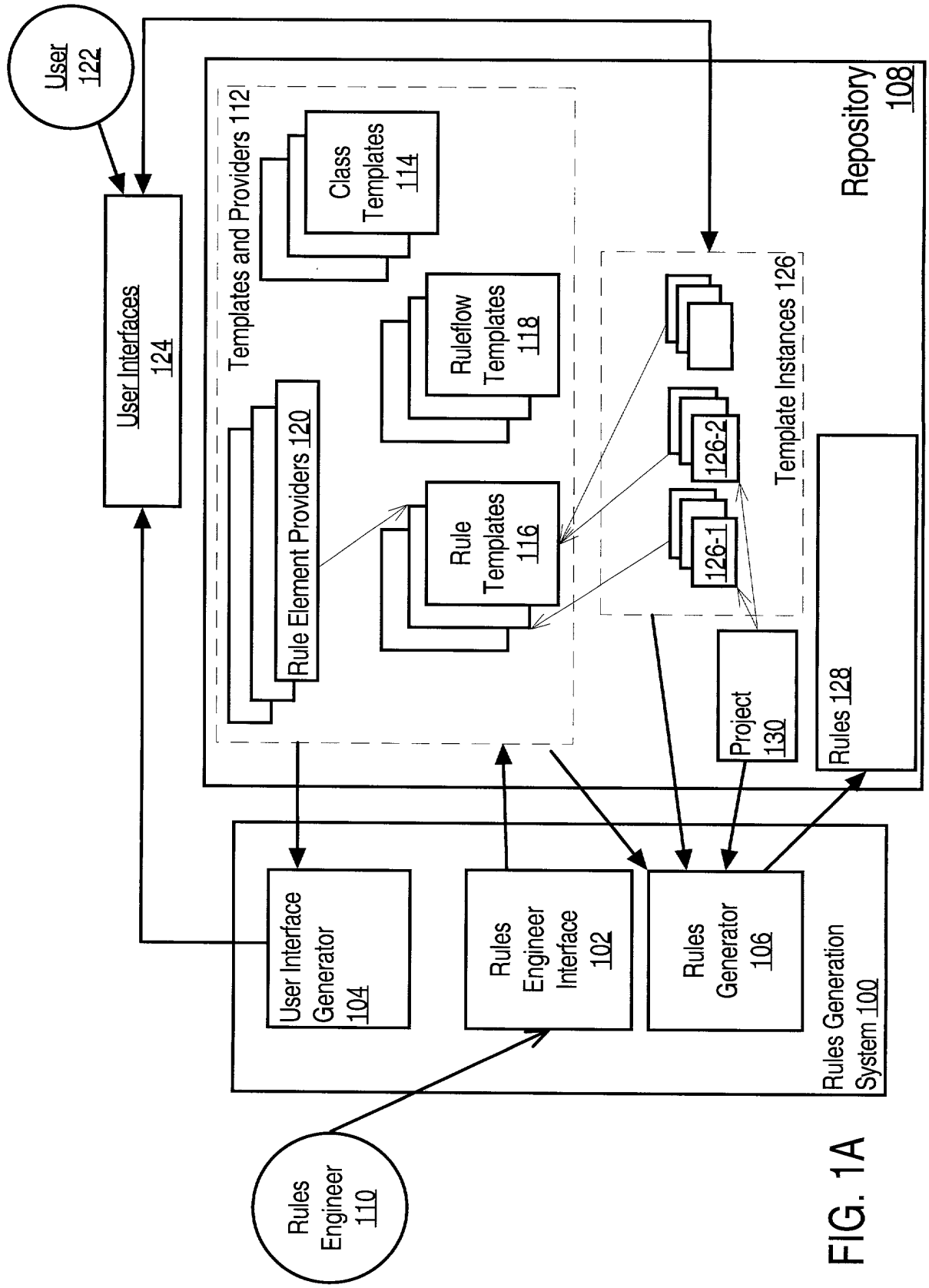
User 122
User Interfaces 124
Repository 108
Templates and Providers 112
Class Templates 114
Ruleflow Templates 118
Rule Element Providers 120
Rule Templates 116
Template Instances 126
126-2
126-1
Project 130
Rules 128
Rules Generation System 100
User Interface Generator 104
Rules Engineer Interface 102
Rules Generator 106
Rules Engineer 110

FIG. 1A

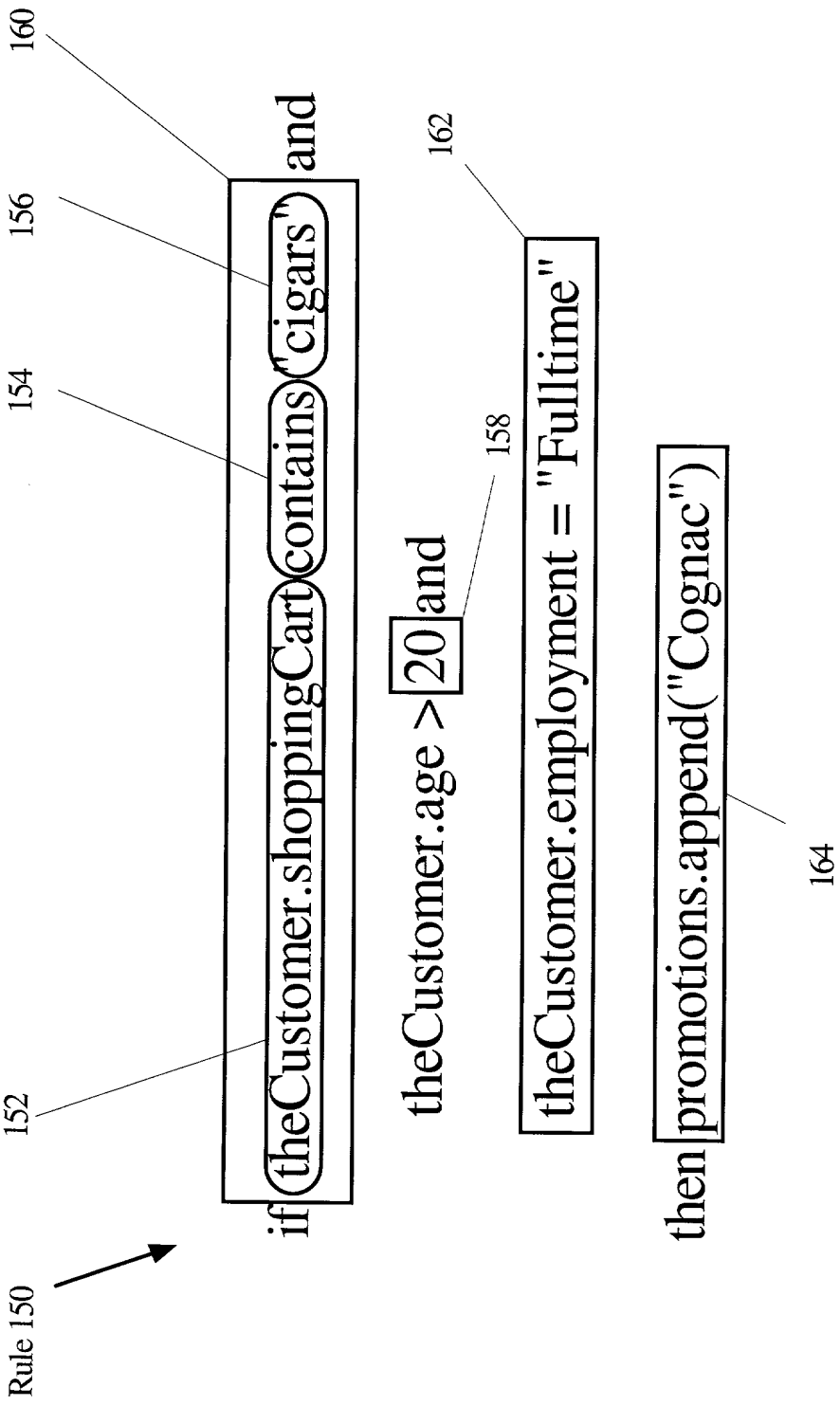
Rule 150
152
154
156
160
162
158
164
if theCustomer.shoppingCart contains "cigars" and
theCustomer.age > 20 and
theCustomer.employment = "Fulltime"
then promotions.append("Cognac")

FIG. 1B

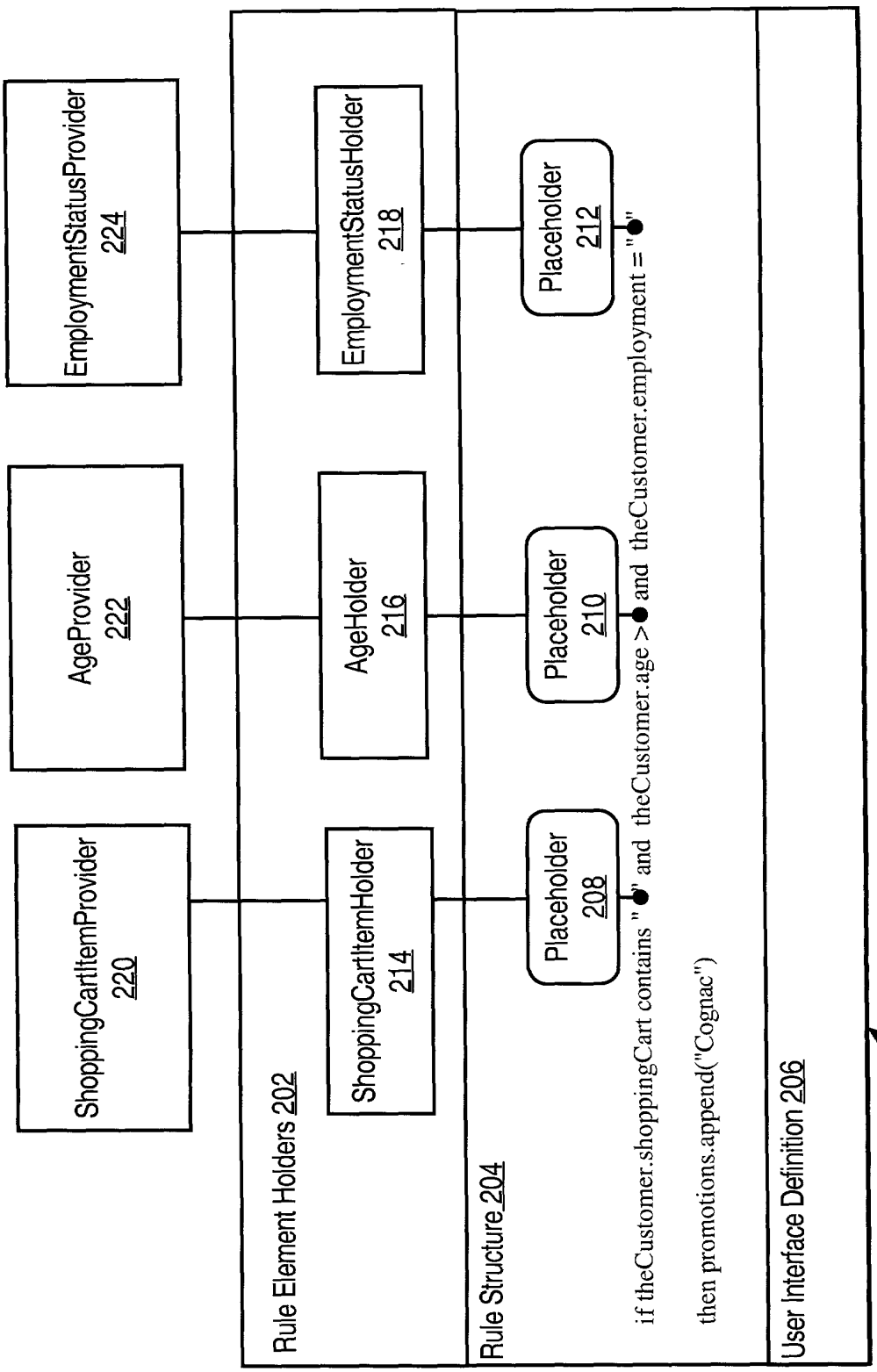
ShoppingCartItemProvider 220
AgeProvider 222
EmploymentStatusProvider 224
Rule Element Holders 202
ShoppingCartItemHolder 214
AgeHolder 216
EmploymentStatusHolder 218
Rule Structure 204
Placeholder 208
Placeholder 210
Placeholder 212
if theCustomer.shoppingCart contains " " and theCustomer.age > " " and theCustomer.employment = " "
then promotions.append("Cognac")
User Interface Definition 206
Rule Template 200

FIG. 2

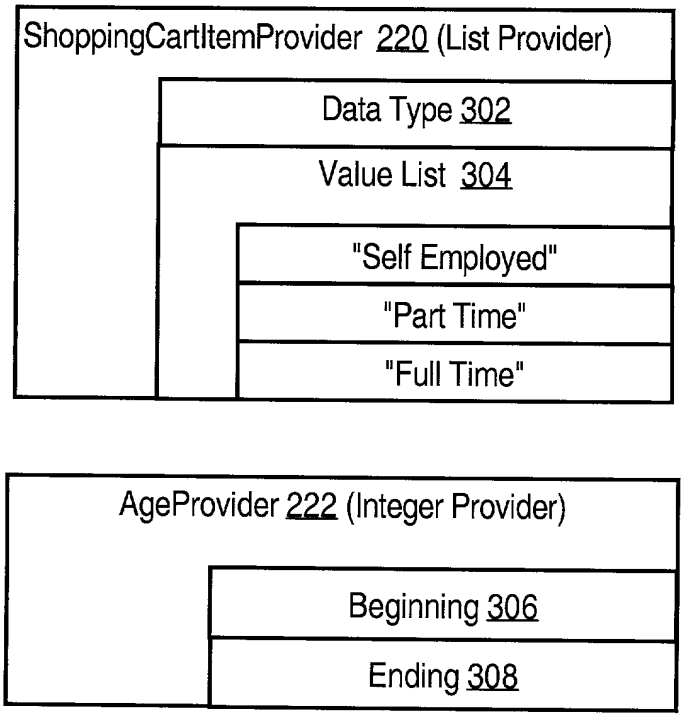
ShoppingCartItemProvider 220 (List Provider)
Data Type 302
Value List 304
"Self Employed"
"Part Time"
"Full Time"
AgeProvider 222 (Integer Provider)
Beginning 306
Ending 308
EmploymentStatusProvider 224 (Database Table)
Connect Details 310
Query 312

FIG. 3

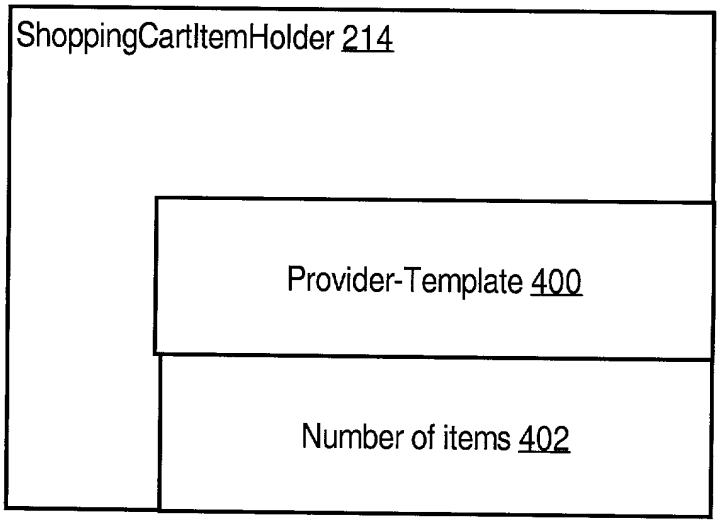
ShoppingCartItemHolder 214
Provider-Template 400
Number of items 402

FIG. 4

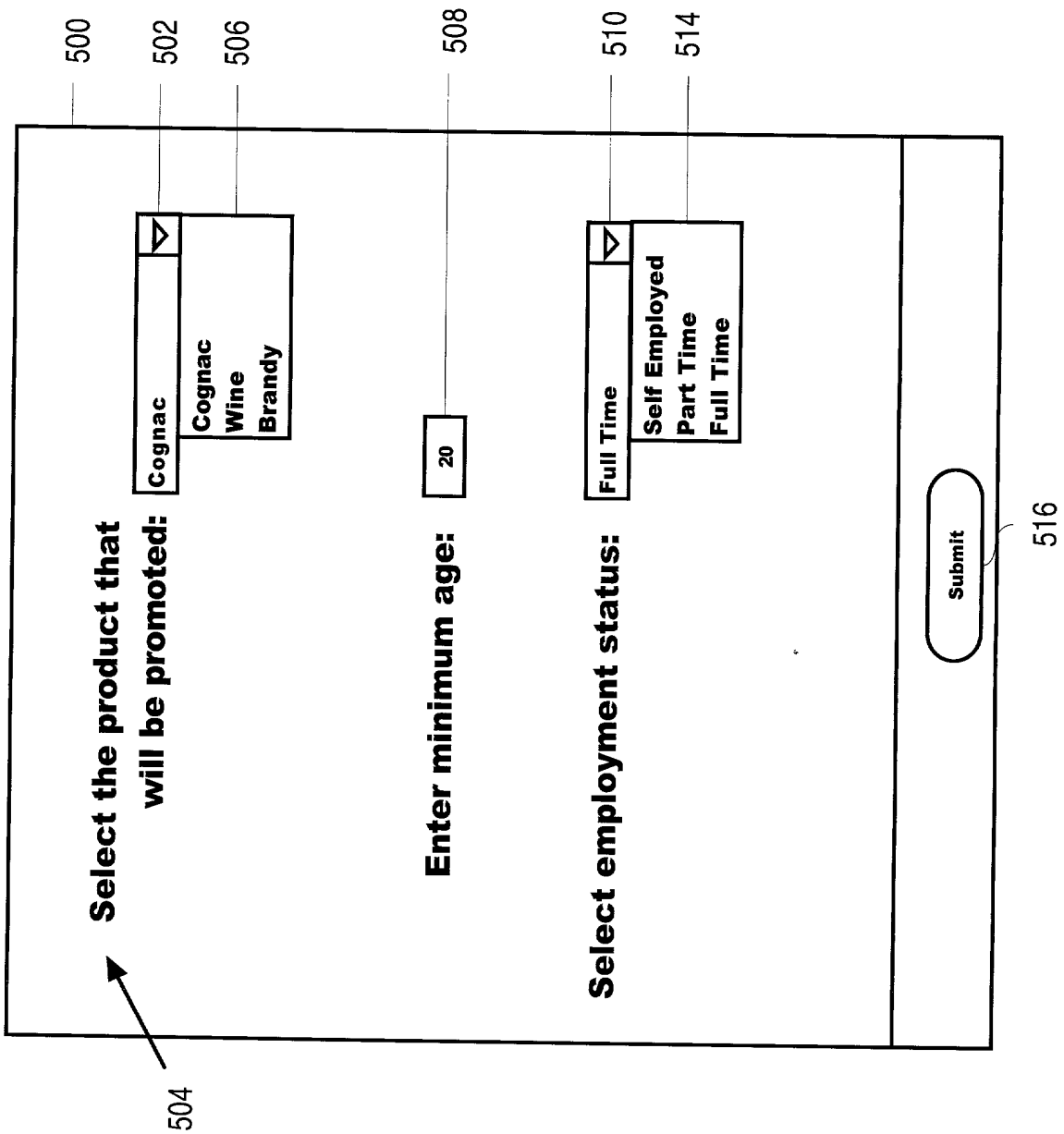
500
502
506
508
510
514
Select the product that will be promoted:
Cognac
Cognac
Wine
Brandy
Enter minimum age:
20
Select employment status:
Full Time
Self Employed
Part Time
Full Time
Submit
504
516

FIG. 5

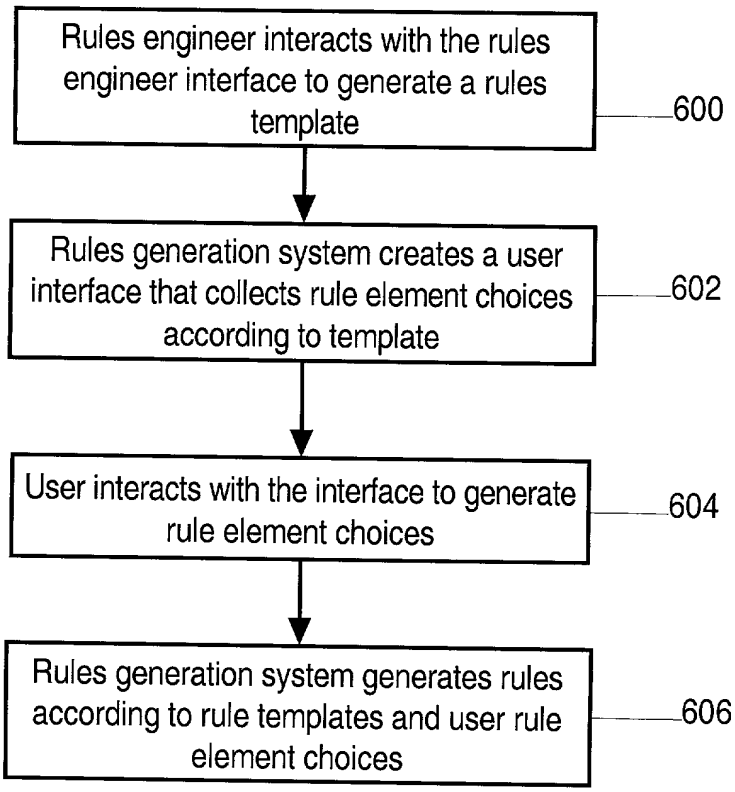
Rules engineer interacts with the rules engineer interface to generate a rules template
600
Rules generation system creates a user interface that collects rule element choices according to template
602
User interacts with the interface to generate rule element choices
604
Rules generation system generates rules according to rule templates and user rule element choices
606

FIG. 6

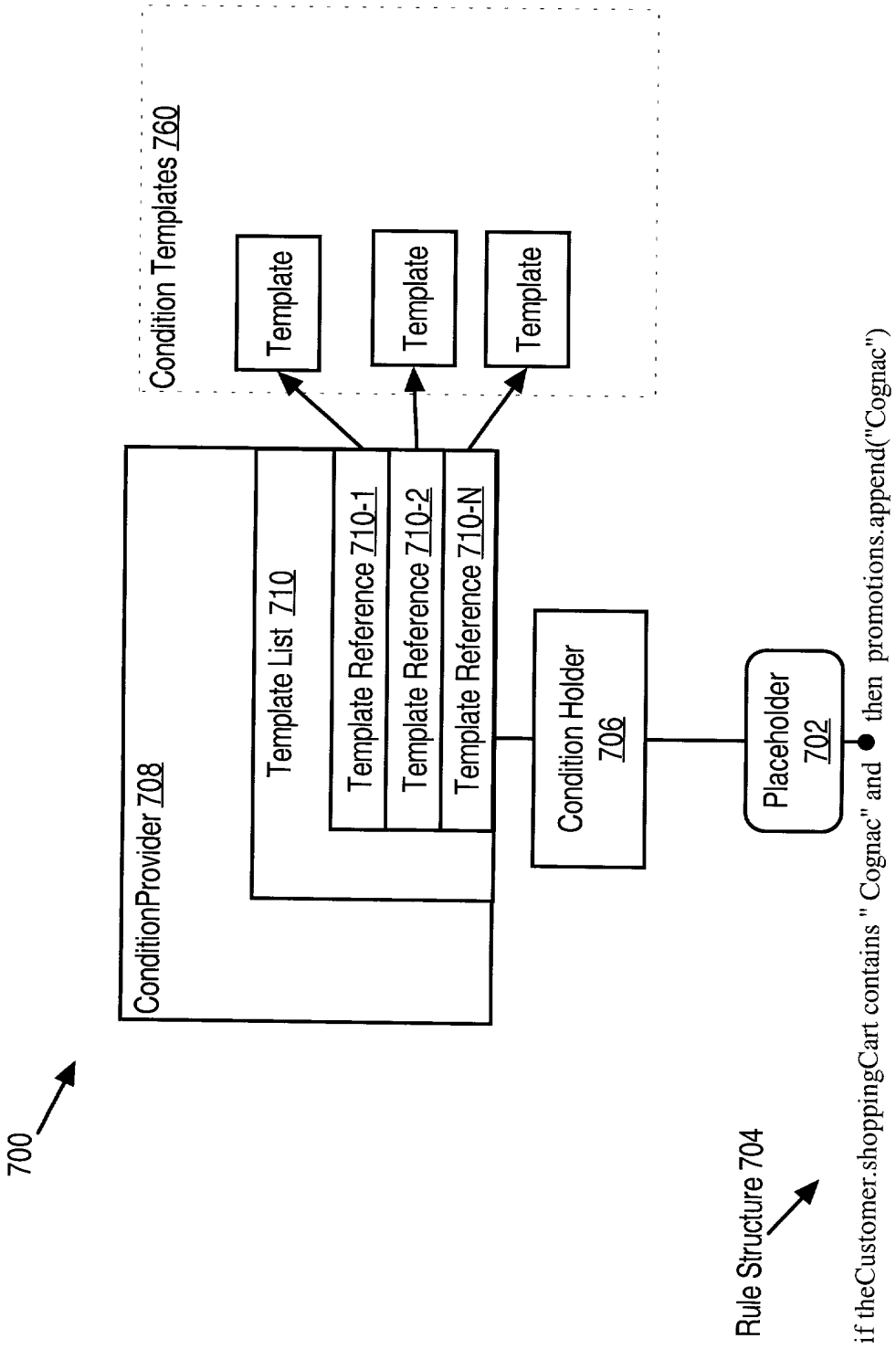
700
ConditionProvider 708
Template List 710
Template Reference 710-1
Template Reference 710-2
Template Reference 710-N
Condition Templates 760
Template
Template
Template
Condition Holder 706
Placeholder 702
Rule Structure 704
if theCustomer.shoppingCart contains " Cognac" and then promotions.append("Cognac")

FIG. 7

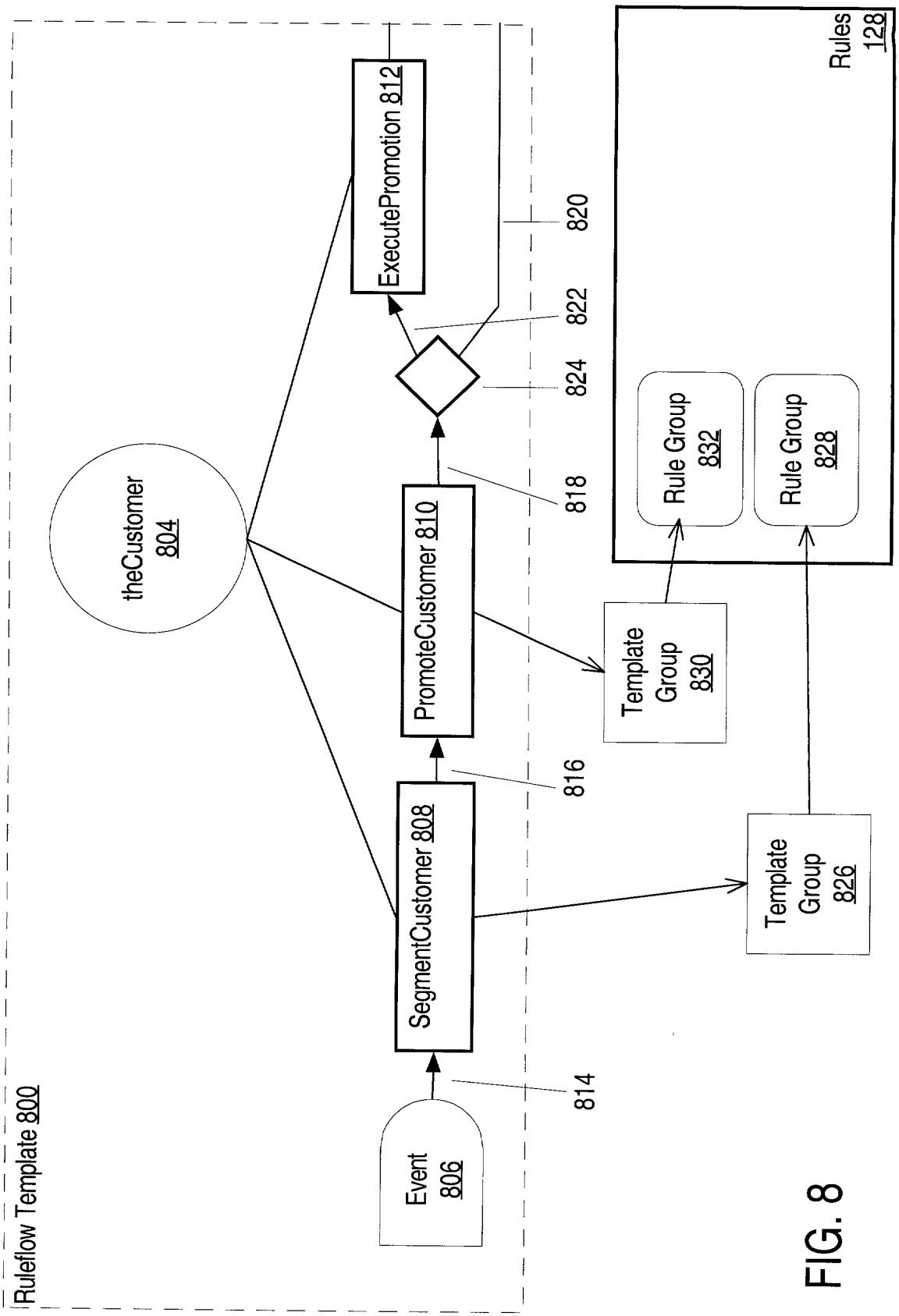
Ruleflow Template 800
Event 806
814
SegmentCustomer 808
816
PromoteCustomer 810
818
ExecutePromotion 812
820
822
824
theCustomer 804
Template Group 830
Template Group 826
Rules 128
Rule Group 832
Rule Group 828

FIG. 8

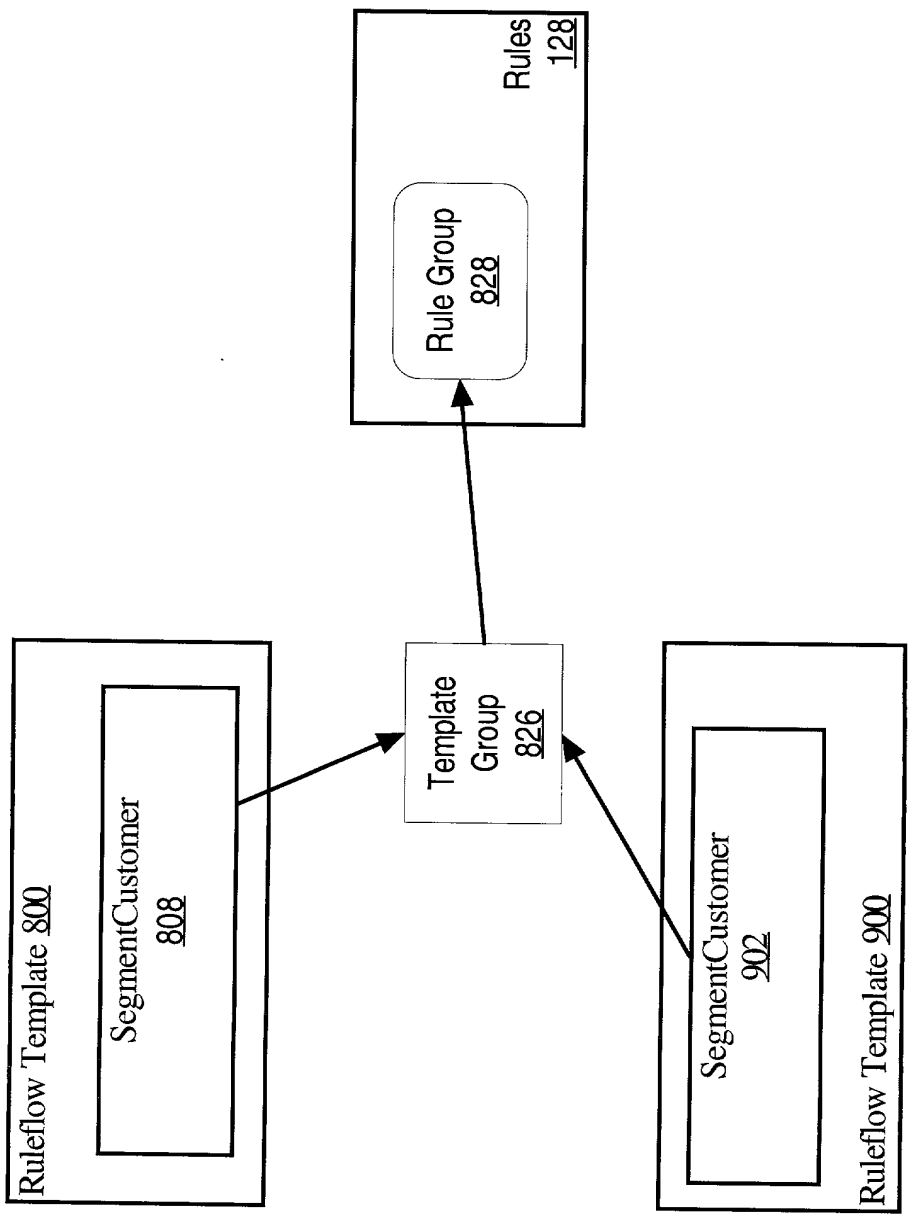
Rules
128
Rule Group
828
Ruleflow Template 800
SegmentCustomer
808
Template
Group
826
Ruleflow Template 900
SegmentCustomer
902

FIG. 9

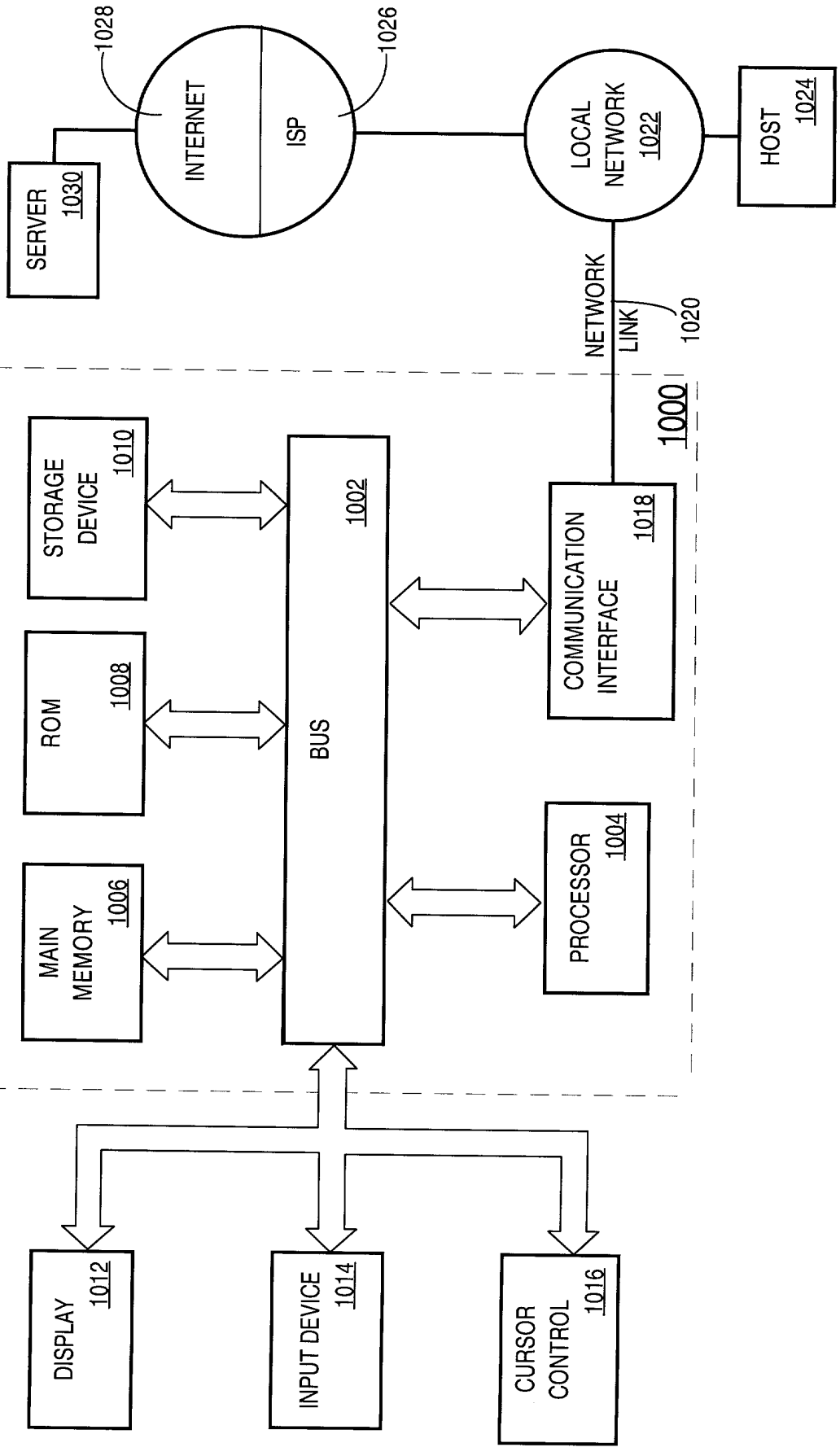
1028
INTERNET
ISP
1026
SERVER
1030
LOCAL NETWORK
1022
HOST
1024
NETWORK LINK
1020
1000
STORAGE DEVICE
1010
ROM
1008
MAIN MEMORY
1006
BUS
1002
COMMUNICATION INTERFACE
1018
PROCESSOR
1004
DISPLAY
1012
INPUT DEVICE
1014
CURSOR CONTROL
1016

FIG. 10